Cre-X-Mice Database

User guide

Table of Contents

Table of Figure	ii
Introduction	1
Searching the Database	1
Quick Search Mode	1
Advanced Search	1
Viewing Search Results	2
Registration	3
Your Account	4
Editing Your Account	4
Editing Your Entry	5
Verifying Your Entry	5
Discussion Board and User Comments	6
Discussions	6
Commenting on a Transgenic Line	6
Submitting a New Transgenic Line	7
Step 1	7
Step 2	9
Step 3	13
Update Mailing List	11
Registration	11
User Interface	12
Adding Queries	12
Editing Queries	13
Deleting Queries	13
Keeping Track of Queries	14
Appendix A	14
Registration Error Messages	17
Editing Account Error Messages	16

Table of Figure

Figure 1 Quick Search Example	1
Figure 2 Advanced Search Example	
Figure 3 Search Result Collapsed View	
Figure 4 Expanded Search Result	
Figure 5 Registration Form Example	
Figure 6 User Account Example	
Figure 7 Edit Account form with password change example.	
Figure 9 Verify Entry Page Options	
Figure 8 Verify Entry Link	
Figure 10 Discussion Example	
Figure 11 Comment Form Example	
Figure 12 Submission Step 1 Example	
Figure 13 Step Two, Stage Selection (Above) and Anatomical Area Selection (Below)	
Figure 14 Step Two, Example for Step 3-5 (above) and Finished Specificity with Delete Button	
	10
Figure 15 Update Mailing List Registration Form	11
Figure 16 Main User Interface	
Figure 17 Form for Adding Queries	
Figure 18 User Interface for Query Edition	
Figure 19 Example of Updated Queries	

Introduction

Cre-X-Mice went through a large update in the month of December, there were many modifications and new features introduced. Searching the database is now possible by the use of keywords, as well as the advanced mode. When a new transgenic line is submitted, an email is sent to the author for automatic verification. Cre-X-Mice now supports user registration. There are many benefits to being a registered user, you can receive notifications about new entries added to the database, view and edit your own entries, and obtain user feedback by e-mail on specific entries. It is strongly recommended that you register if you use the database frequently or if you are the author of any entries in the database. User feedback is now available for the transgenic lines, as well as a general discussion board on the main page. This guide will describe all these new features in detail and should prove useful to new users as well as frequent visitors.

Searching the Database

To access the search page click "Search Database" on the menu bar.

Quick Search Mode

With the last update it is now possible to search the database based on key words. Enter key words in the Quick Search field and click the search button.

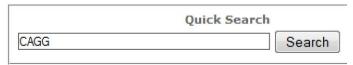


Figure 1 Quick Search Example

Advanced Search

The advanced search window provided users with detailed categories to filter the results.

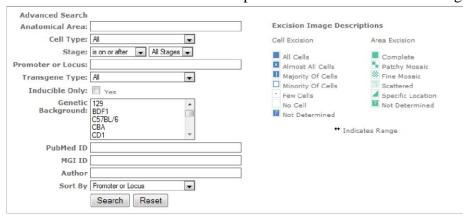


Figure 2 Advanced Search Example

Viewing Search Results

Once the search is complete the search results will be displayed at the bottom of the page in collapsed form. You may click on the blue folder to expand or collapse all results.



Figure 3 Search Result Collapsed View

Let's look at the very first result. +4 is the number of specificities this entry contains. Green folder expands and collapses the specificities. Redirects to viewing this transgenic line and all the details. Then we see the Promoter and the Author of the entry. The author verification section exists because not all the entries in this database are submitted by the creator of the transgenic line (Author), Cre-X-Mice does try to contact the Authors and have them verify all the information. View Comments section allows to open a new page showing all the comments, if there are nouser comments for a specific like the button is grayed out. Anyone may add a comment to the entry by following the add link under "Add Comment".

Click the green folder to expand the first result. We can now see all the specificities the entry contains. By clicking on the headers "Stage", "Cell Type", and "Anatomical Area" the specificities are sorted to make viewing easier for the users.

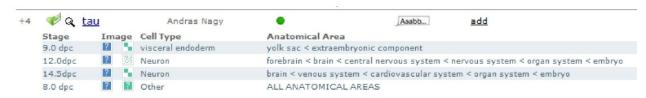


Figure 4 Expanded Search Result

Registration

The first step is creating a new account, from the main page please navigate to Log In/Register located on the menu bar to the left. Once the Log In screen loads click on the "Register" button to proceed to the registration form. Below is an example of a filled out registration form. Please notice that Organization field is optional. Fill out all the fields and click "Register" to submit the request. If you are not redirected to Log In screen and receive an error message please see Registration Error Messages section for instructions.

NAME OF THE PARTY		
Cre-X-Mice: A Data	base of Cre Transgen	ic Lines
Main Page Search Database Submit Transgenic Line Log In/Register Credits Nagy Lab Homepage Contact Us	An email will be sent to the pro- First Name Last Name Organization Email Confirm Email	jouk Vlad_5_5_5_@hotmail.com Vlad_5_5_5_@hotmail.com
	Password Confirm Password	•••••
	Word Verification Please help us prevent false entries by typing the words you see to the right into the field provided.	Receive email updates about database development Copper gest Type the two words: clopped gest Register

Figure 5 Registration Form Example

Once the registration form is accepted the browser is redirected to Log In page and the following message is displayed "Registration successful. An activation email has been sent to (email)".

The account now needs to be activated. Check your inbox for an account activation email from Cre-X-Mice, click on the link in the email to activate your account. You will be redirected to the Log In page with the message "Your account has successfully been activated." Registration is complete use you email and password to log in.

Your Account

Being a registered user has its privileges, you can modify your own entries and request email notifications for newly added transgenic lines. Soon a new feature will be implemented so that registered users can monitor specific entries, the user will be notified about any comments and any changes. Below is an example of what the user will see after logging in.

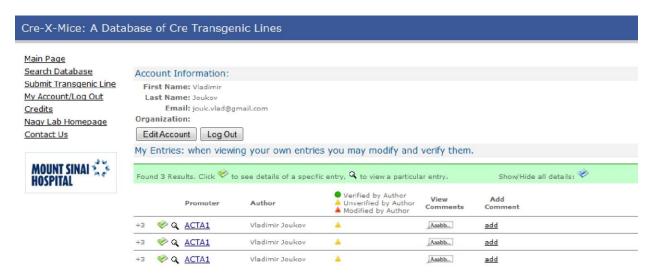


Figure 6 User Account Example

Editing Your Account

Once logged in click on the Edit Account button, there you will be able to edit all your information. When you click on "Save" if an error message appears please see (Editing Account Error Messages) for more information. An example of filled out Edit Account form to change the password is provided as guidance.

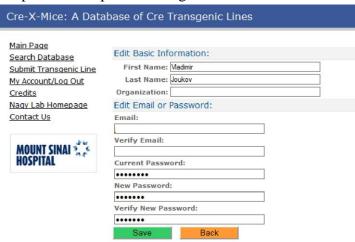


Figure 7 Edit Account form with password change example.

Editing Your Entry

- 1) Registered users are allowed to make changes to the transgenic lines they have submitted. To edit your entry you must first log in (See Logging In for details). After logging in find the entry you want to modify and click on the (view) icon. Scroll to the very bottom of the page and click the Edit (Edit) button.
- 2) If you are verifying an entry because you received an automated email from Cre-X-Mice you may also edit the information. After following the link scroll down and click the Edit (Edit) button.

This will redirect you to Submit Transgenic Line page with the information already filled out. Follow the steps as if creating a new entry (See Submitting a New Transgenic Line) for details. Once you submit the entry you will need to verify it, a verification email is automatically sent to the email address provided. The modified entry also needs to be confirmed by an administrator, once that is done it will permanently replace the old one.

Verifying Your Entry

1) Registered users are allowed to verify their own unverified entries. Log into your account and click on the (a view) icon of the entry you want to verify. Under "Publication Details" find "This is your entry, please take a moment verify it: <u>verify</u>" click on verify.

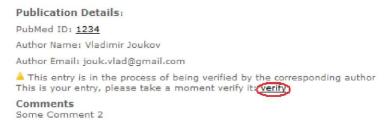


Figure 8 Verify Entry Link

2) If you received an email from Cre-X-Mice requesting you to verify a new entry in the database please click on the link provided in the email.

This will direct you to a page showing the new entry. Please make sure all the information is correct. You may choose to verify, edit, or decline the transgenic line at the bottom of the page (see Editing Your Entry for details).



Figure 9 Verify Entry Page Options

Discussion Board and User Comments

Discussions

A discussion board was added to the main page of Cre-X-Mice database. As soon as main page loads the latest twenty are shown. The discussion board is organized in a tree format so once a post is started replies may be directed to the post or to any reply. Any user or visitor may start a new post and reply to the already existing posts. The following figure shows a discussion.



Figure 10 Discussion Example

To create a new discussion click on the link "New Post". A new discussion must contain a title and a message. User or guest information must also be provided.

To reply to an existing discussion click "<u>Reply</u>". A title for a reply is optional, it may be left blank. User or guest information must be provided.

To view all discussions, not just the latest twenty click "<u>All Posts</u>". Once redirected to the page containing all of the Cre-X-Mice discussions it is also possible to search for key words.

To view all the replies click "Expand replies". Notice some replies may be then further expanded.

Expanded discussions may be collapsed by clicking "Collapse replies".

Commenting on a Transgenic Line

When viewing an entry in the database users and guests who have knowledge of that transgenic line are encouraged to leave comments. To comment on the transgenic line scroll to the bottom of the page to "Post a Comment" form. A valid comment must contain a Subject, a message, and the information of the poster. Notice, Cre-X-Mice will only display your email address and organization if you check the "Show My Information" checkbox. Otherwise only the first and last name will be shown.

1) As a user, if you are logged in while posting a comment, Cre-X-Mice will automatically use your information for the comment, simply enter the subject, message body, and check

- "Show My Information" if you wish others to see your email and organization. Once the form is complete click "Submit Comment"
- 2) If you are a user but you are not logged in please expand the User folder enter your email and password. Fill out the rest of the form and click "Submit Comment"
- 3) Visitors without a registered account are required to provide their first and last names and an email address, organization is optional. If you are a visitor please expand the Guest folder and fill out the form.

Below is a filled out comment form to use as a guide.



Figure 11 Comment Form Example

Submitting a New Transgenic Line

To begin the process of submitting a new transgenic line click "<u>Submit Transgenic Line</u>" on the left side menu. The browser will be redirected to step one of the submission process

Step 1

Notice to select multiple options hold ctrl and use left mouse click, the selected options will be highlighted blue.

- 1) Transgene Type: There are three possible options for Transgene Type, please select one.
- 2) Promoter or Locus: Start entering the promoter, the database will look up existing promoters and provide you with suggestions. If there are any synonyms for the promoter please enter them below separated by a comma (,).
- 3) Promoter Species: Select the species from the dropdown list. For species that are not listed select "Other" and specify the unlisted specie below.
- 4) Transgene Insertion: Enter the transgene insertion here.

- 5) Inducibility: Select indcibility from the list, you may select multiple options. For options not in the list select "Other" and specify the inducibility below.
- 6) Genetic Background: Select genetic background from the list, you may select multiple options. For options not in the list select "Other" and specify the genetic background below.
- 7) Is this Cre Transgenic Line Published?: Published transgenic lines require PubMed ID and author contact information for verification purposes. If the line is published click yes and fill out the required information below.
- 8) MGI ID: Enter the Mouse Genome Informatics ID here, this field is optional and may be left blank.
- 9) Holding Sites: Optional field and may be left blank.
- 10) Stock Number: This field relates to the holding sites. Enter the stock number or a url to the page.

Example of a filled out step one form is provided as a reference.

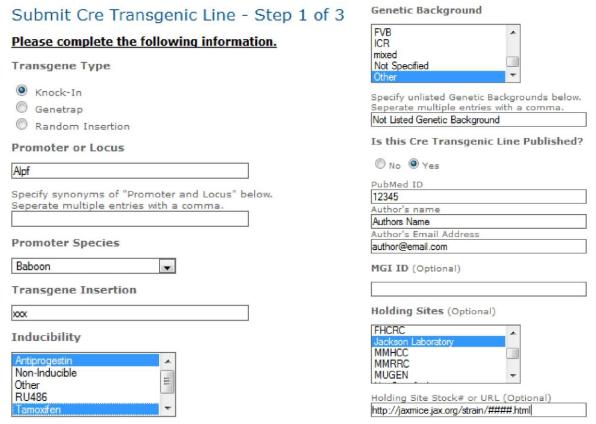


Figure 12 Submission Step 1 Example

Once all the required information has been entered click continue at the bottom of the page. The database will check that all the fields are correct and proceed to step two.

Step 2

Step Two is where specificities are added to the entry. At least one specificity must be added before proceeding to step three and submitting the transgenic line. Once all needed specificities are added click "Next Step".

For every specificity the following steps must be taken:

1) Select the stage the characterization was performed at. Once a stage is selected mouse anatomy loads showing all the anatomical areas possible in that stage of development.

Specificity Characterization Was Performed At:



2) The second step is to select the anatomical area. It is possible to search for anatomical area or to expand the tree manually. Green folder and green checkmark represent expandable sections and end points of anatomy tree respectively. To browse through the tree manually click on the green folder to expand an area and on the name to select that area. Another option is to search through the tree, enter a keyword in the search field and press the search button. Found anatomical areas will be highlighted in yellow and the tree will be automatically expanded. Selected anatomical area will be highlighted green and the full path will be shown.

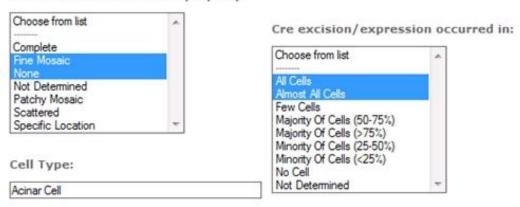


Figure 13 Step Two, Stage Selection (Above) and Anatomical Area Selection (Below)

In this example keyword embryo was searched for and epiblast was selected as the anatomical area.

- 3) Select the excision property from the list. You may select multiple options by holding ctrl and using left mouse click to specify a range.
- 4) To select the cell type start entering text in the field, the database will perform a suggestive search to help. If you do not see required cell type in suggestive search enter the cell type manually, it will be added to the database.
- 5) Select the cell amount cre expression occurred in. To select a range between two or more options hold ctrl and use left mouse click.

Please define the excision property:



6) Click add specificity, the page will reload and added specificity will be displayed at the top. If there is a mistake in the specificity it is possible to delete it by clicking the recycling bin icon. Steps one through five must be repeated for each specificity to be added.



Figure 14 Step Two, Example for Step 3-5 (above) and Finished Specificity with Delete Button (below)

Step 3

Step three provides an overview of the new transgenic line to verify all of the information. The submitter may enter an author comment for the line, select to be notified when the transgenic line is accepted into the public database, return to any of the two previous steps to edit the submission, or finish the submission by clicking "Submit Entry". Once all the information is verified press "Submit Entry". Every new entry must be approved by the database administrator before going into the public database and should be verified by the author. A verification email is sent to the author if publication details are given (see Verifying Your Entry for details).

Update Mailing List

This recently added feature is used to notify users about the new queries updated into the database. It is recommended for the user to subscribe to this update mailing list if certain queries requested by the user do not return any results in the search, or if the user wants to be notified about the most recently updated entries. Once an entry, which contains particular data that match the user's requested queries, is updated, the user would receive an email notification regarding the information of such entry.

Registration

There is a brief instruction at the top of the form that explains the purpose of update mailing list and its related features. The required fields include: user's first and last name, up to eight queries, user's email address and word verification. The user can also unsubscribe to the update mailing list if he/she has previously subscribed, in which the email address is the only required field in such case.

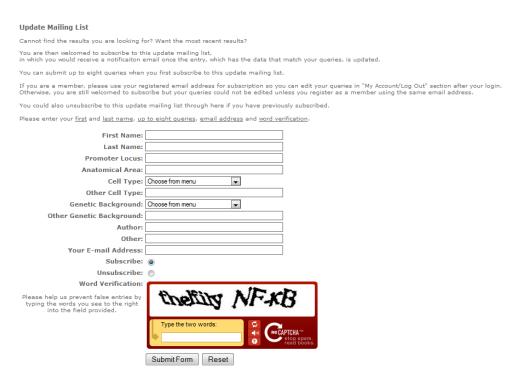


Figure 15 Update Mailing List Registration Form

Once the registration form is submitted successfully, a confirmation email would be sent to the user's email inbox using the email address specified. The content of email displays the corresponding queries that have been requested.

User Interface

The user is welcomed to add, edit and/or delete any requested queries through the update mailing list user interface. If the user is not a registered member of Cre-X-Mice, he/she must use the exact email address used for update mailing list subscription to register as one under "Log In/Register", in order to edit the requested queries. Otherwise, registered member could first log in to access the "Account Information" page, in which a section of "My Requested Queries" is displayed at the bottom half of the page.

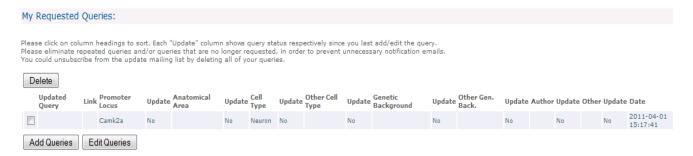


Figure 16 Main User Interface

Adding Queries

The user could add as many queries as needed. First, click the "Add Queries" button right below the table. A form shown in the following figure would be prompted:

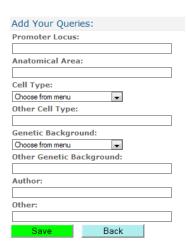


Figure 17 Form for Adding Queries

The user could submit up to eight queries at a time. After the form is filled, click "Save" to get back to the main user interface as illustrated in Figure 16. A row of new entry would be shown at the top of the table, because the table follows the descending order for dates. The user could also click "Back" to go back to the main user interface without adding any queries.

Editing Queries

The user could first click the "Edit Queries" right below the table, and beside the "Add Queries" button in the main user interface. Next, a user interface for query edition is shown below:



Figure 18 User Interface for Query Edition

The user could select a specific entry required for edition then click "Edit" button, and the form which is similar to Figure 19 would be prompted. The existing queries would be shown in corresponding fields, and the user could edit the existing queries and/or adding more queries by filling in the form. Next, click "Save" to get back to the user interface for query edition. If the query edition is complete, the user could click "Back" right below the table in Figure 18 to get back to the main user interface illustrated in Figure 16.

Deleting Queries

There are checkboxes next to each specific row of queries. The user could first select the as many queries as needed by checking off the checkboxes. Afterward, click the "*Delete*" button at the top of the table shown in Figure 16 to delete the selected queries.

It is recommended that the user *deletes repeated queries or any queries that are no long requested* in order to prevent unnecessary notification emails. We would greatly appreciate your help in making the update mailing list as user friendly as possible by minimizing the number of unnecessary queries.

The user could unsubscribe from the update mailing list by *deleting all of the requested queries*.

Keeping Track of Queries

Each "update" column next to the every requested query shows the query status of whether or not it has been updated, since the user last adds or edits that particular query. The following is an illustration:

Updated Query	Link	Promoter Locus	Update	Anatomical Area	Update	Cell Type	Update	Other Cell Type	Update	Genetic Background	Update	Other Gen. Back.	Update	Author	Update	Other	Update	Date
		Camk2a	Yes		No	Neuron	Yes		No		No		No		No		No	2011-04-01 15:19:35
Camk2a	Promoter Locus 2011-04-01 15:19:35		No		No		No		No		No		No		No		No	2011-04-01 15:19:35
Neuron	Cell Type 2011-04-01 15:19:35		No		No		No		No		No		No		No		No	2011-04-01 15:19:35

Figure 19 Example of Updated Queries

In this example, since an entry that contains information regarding the promoter locus "Camk2a" and the cell type "Neuron" has been updated, the query status of the corresponding requested queries are changed to "Yes". At the left side of the table, the updated queries are shown with the embedded links for the access of the updated entry, which specify the categories of the updated queries and the date of the entry update. In addition, the user would receive a notification email regarding the updated entry with the embedded link.

Appendix A

Registration Error Messages

When submitting your registration form you may receive an error message, this section explains the errors and steps to correct them. Notice password and password confirmation must be reentered when resubmitting your form after correcting the errors.

List of possible errors.

You must enter first and last name.

The first name or last name field is blank, please fill in both fields.

You must enter an email address.

The Email field is blank, an email address must be provided for registration confirmation and contact information.

You have entered an invalid email address.

The Email address provided is not a valid email address, make sure you have entered the email address correctly. An email must be in the following format username@domain.top-level domain. Example of a valid email address: cre_mice@nagy.com in which cre_mice is the username, nagy is the domain and com is the top-level domain.

Email and email confirmation do not match.

The Email and Confirm Email fields are not the same, make sure you have entered the email address correctly in both fields.

The email address is already in use.

This email address already belongs to a registered user or an author of an entry.

If you are an Author of an entry you are already in the database. Log in using your email and "author" as the password field and click on the Resend activation email link.

The email address entered belongs to an author of a transgenic line. This means that this email address was given as contact information of the author. Therefore your information is already in the database, please go to the Log In/Register page, enter your email and use "author" as password. You will receive a warning message "This user account has not been activated, an activation email has been previously sent to (email).

Resend activation email: Resend" Click on Resend then check your email for account activation from Cre-X-Mice. Once you have activated your account you may log in using your email and "author" as password, please proceed to Edit Account and change your password from "author". If you need more information on changing your password see Managing My Account section.

You must enter a password

The password field in empty, a password must be entered.

Your password must be at least 6 characters in length.

The password you have entered is too short, password of minimum 6 characters is required for security purposes.

Password and password confirmation do not match.

The Password and the Confirm Password fields do not match. The Confirm Password field is designed to make sure the user enters a password he or she will remember. Please make sure you have entered the same password in both fields.

Your word verification failed. Please try again.

Word verification is designed to make sure that spam software does not register as a user on the database and post unwanted ads and comments. You have not correctly entered the two displayed words, please try again. You may request new words by clicking on the icon.

Server error, could not create user.

This error appears if there is a problem with the server. Please try again in a while, if the registration still does not work please reply to the bugs discussion on the main page or contact the database administrator directly at jouk.vlad@gmail.com.

Editing Account Error Messages

List of possible errors.

Email does not match Verify Email.

Make sure both Email and Verify Email are the same and that you have entered the email address correctly.

New Email is not a valid email address.

The email address is invalid, Cre-X-Mice database requires all users to have a working

email address for contact and security purposes. Make sure you have entered the email address

correctly. Example of a valid address: cre_mice@nagy.com.

Incorrect Password.

You have made a mistake while entering your current password. Current password is required when changing passwords for security reasons.

New Password and Verify New Password do not match.

The new password and verification of the new password are not the same. Please choose a password that will be easy for you to remember and verify you have entered it correctly.

Failed to update account: (ID).

This is a server error. Please try again in a while. If this error continues to repeat please contact the system administrator through front page discussion board.